P24643.A02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Osamu KANIE et al.

Appl. No. : 10/726,550

Filed : December 4, 2003

For : AZASUGAR COMPOUNDS

Group Art Unit : 1614

Examiner : Not Yet Assigned

Confirmation No. : 5494

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §1.56 and §§1.97-1.98, Applicants hereby bring following information to the attention of the Examiner.

Applicants hereby submit copies of an International Search Report and an International Preliminary Search Report (each in English) as well as a copy of WO 03/008379 which published from PCT/JP02/05672 of which the present application is a continuation-in-part application. The Examiner is invited to inspect the relevance indicated in these documents with respect to the International Application.

T. M. WORDNIGG et al., "Novel, Lipophilic Derivatives of 2,5-dideoxy-2,5-imino-D-mannitol (DMDP) are Powerful β-Glucosidase Inhibitors," Bioorganic and Medicinal Chemistry Letters, Vol. 11, No. 8, pp. 1063-1064, 2001;

A. HERMETTER et al., "Powerful Probes for Glycosidases: Novel, Fluorescently Tagged Glycosidase Inhibitors," Bioorganic and Medicinal Chemistry Letters, Vol. 11, No. 10, pp. 1339-

1342, 2001;

T. M. WORDNIGG et al., "Biologically Active 1-aminodeoxy and 1-*o*-alkyl Derivatives of the Powerful D-glucosidase Inhibitor 2,5-dideoxy-2,5-imino-D-mannitol," Journal of Carbohydrate Chemistry, Vol. 19, No. 8, pp. 975-990, 2000;

WO 00/68194, which was published on November 16, 2000;

I. MCCORT et al., "Synthesis and Evaluation as Glycosidase Inhibitors of 2,5-imino-D-glucitol and 1,5-Imino-D-mannitol Related Derivatives," Bioorganic and Medicinal Chemistry, Vol. 8, No. 1, pp. 135-143, 2000;

WO 95/24392, which was published on September 14, 1995, and its indicated family member U.S. Patent No. 5,451,679;

C. H. WONG et al, "Synthesis and Evaluation of Homoazasugars as Glycosidase Inhibitors," Journal of Organic Chemistry, Vol. 60, No. 6, 1492-1501, 1995;

R. C. REYNOLDS et al., "Ethambutol-sugar Hybrids as Potential Inhibitors of Mycobacterial Cell-wall Biosynthesis," Carbohydrate Research, Vol. 317, pp. 164-179, 1999;

I. MCCORT et al., "Synthesis of Ester- and Amide-Linked Pseudo-azadisaccharides via Coupling of D-glucose with 6-amino-6-deoxy-2,5-imino-D-glucitol," Tetrahedron Letters, Vol. 39, No. 25, pp. 4463-3366, 1998;

K. D. JANDA et al., "Chemical Selection for catalysis in Combinatorial Antibody Libraries," Science, Vol. 275, No. 5302, pp. 945-948, 1997;

S. H. KANG et al., "Intramolecular Cyclization of C_2 Symmetric and *meso*-Iodo Amino Alcohols: A Synthetic Approach to Azasugars," Tetrahedron Letters, Vol. 38, No. 4, pp. 607-610, 1997;

I. MCCORT et al., "Practical Route to D-Manno and D-Gluco Azasugars from C_2 Symmetric Bis-aziridines," Tetrahedron Letters, Vol. 37, No. 43, pp. 7717-7720, 1996;

L. CAMPANINI et al., "One Step Synthesis of Sulfur and Nitrogen Linked Aza-disaccharide Precursors from D-Mannitol Derived Bis-aziridines," Tetrahedron Letters, Vol. 37, No. 29, pp. 5095-5098, 1996;

L. CAMPANINI et al., "Concise Synthesis of New Homoazasugars. Fully Substituted, Functionally Diverse Pyrrolidines," Tetrahedron Letters, Vol. 36, No. 44, pp. 8015-8018, 1995;

J. FITREMANN et al., "Regioselective Cyanide Ring Opening of C_2 Symmetric Bis-Aziridines by Cyanide," Synlett, Vol. 3, pp. 235-237, 1995;

M. H. M. G. SCHUMACHER-WANDERSLEB et al., "Preparation of the N-Acetylglucosaminidase Inhibitor 1-Acetamido-1,2,5-trideoxy-2,5-imino-D-glucitol from Methyl α-D-Mannopyranoside," Liebigs Ann. Chem., Vol. 6, pp. 555-561, 1994; and

J. FITREMANN et al., "2,5-Disubstituted Pyrrolidines from D-Mannitol-Derived Bis-Aziridines," Tetrahedron Letters, Vol. 36, No. 8, pp. 1201-1204, 1994; and

Japanese Laid-Open Patent Publication No. 4-502619, which was published on May 14, 1992, and its U.S. patent family member U.S. Patent No. 5,348,954.

Applicants respectfully requests that the Examiner consider the above material and cite the same. Copies of the above-noted documents are attached and all of the documents have been

listed on the attached PTO-1449 Form. The Examiner is requested to initial the appropriate spaces on the Form and to return a copy of the form to the Applicants with the next official communication in the present application to confirm consideration of these documents.

Applicants also note that an Office Action on the merits has not issued in the instant application, and thus no fee is believed necessary to ensure consideration of the submitted material. However, if an Office Action on the merits has issued, and is crossing this statement in the mail, the undersigned hereby authorizes the charging of any fee necessary for the consideration of this statement, including any payment under 37 C.F.R. §1.17 (p), to Deposit Account No. 19-0089.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
Osamu KANIE et al.

Bruce H. Bernstein
Reg. No. 29,027

33,094

April 9, 2004
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Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. P24643	Serial No. 10/726,550
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	Applicant Osamu KANIE et al	
	Filing Date December 4, 2003	Group 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5 3 4 8 9 5 4	09/20/94	ALMEN et al			
		5 4 5 1 6 7 9	09/19/95	BARTA et al			

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO
0	3	/ 0 0 8 3 7 9	01/30/03	W.I.P.O				
	0	0 / 6 8 1 9 4	11/16/00	W.I.P.O				
	9	5 / 2 4 3 9 2	09/14/95	W.I.P.O				
	4	- 5 0 2 6 1 9	05/14/92	JAPAN				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		1	T. M. WORDNIGG et al., "Novel, Lipophilic Derivatives of 2,5-dideoxy-2,5-imino-D-mannitol (DMDP) are Powerful;
			β-Glucosidase Inhibitors," Bioorganic and Medicinal Chemistry Letters, Vol. 11, No. 8, pp. 1063-1064, 2001.
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			and Medicinal Chemistry Letters, Vol. 11, No. 10, pp. 1339-1342, 2001.
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		4	I. MCCORT et al., "Synthesis and Evaluation as Glycosidase Inhibitors of 2,5-imino-D-glucitol and 1,5-Imino-D-mannitol
			Related Derivatives," Bioorganic and Medicinal Chemistry, Vol. 8, No. 1, pp. 135-143, 2000.
		5	C. H. WONG et al, "Synthesis and Evaluation of Homoazasugars as Glycosidase Inhibitors," Journal of Organic Chemistry, Vol.
			60, No. 6, 1492-1501, 1995.
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			6-amino-6-deoxy-2,5-imino-D-glucitol," Tetrahedron Letters, Vol. 39, No. 25, pp. 4463-3366, 1998.
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			945-948, 1997.
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	1	0	I. MCCORT et al., "Practical Route to D-Manno and D-Gluco Azasugars from C_2 Symmetric Bis-aziridines," Tetrahedron
			Letters, Vol. 37, No. 43, pp. 7717-7720, 1996.
	1	1	L. CAMPANINI et al., "One Step Synthesis of Sulfur and Nitrogen Linked Aza-disaccharide Precursors from D-Mannitol
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	1	3	J. FITREMANN et al., "Regioselective Cyanide Ring Opening of C_2 Symmetric Bis-Aziridines by Cyanide," Synlett, Vol. 3, pp.
			235-237, 1995.
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